

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

512-684-5700 • WICHITA, KS

GEOLOGIST'S REPORT

(PRINTED TITLE AND SAMPLE LOG)

COMPANY RAYMOND OIL COMPANY, INC.	ELEVATIONS
LEASE * 1 BIGGS	3287 *
FIELD WILDCAT	
LOCATION 1613' FNL & 1765' FWL	3282
SEC 36 T10S 6S R3E 36W	
COUNTY THOMAS STATE KANSAS	COMPLETION AND PLUG PERM 3287 KB
CONTRACTOR L.D. DRILLING, INC.	CASING
SPUD 6-27-15 * COMP 7-22-15	DIAMETER 8 5/8" @ 303'
RTD 4840 LD 4844	FORMATION
WELL ID# 3499 TYPE WELL CHEMICAL	ELECTRICAL SURVEYS
	DUAL IND., DENS.-N, Micro.

SAMPLES SAVED FROM	3600	TO	4840
DRILLING LIQUOR KEPT FROM	3500	TO	4840
SAMPLES OBTAINED FROM	3600	TO	4840
GEOLOGICAL SUPERVISION FROM	3700	TO	4840
GEOLOGIST ON WELL KIM B. SHOEMAKER			

FORMATION TOPS	LOG	SAMPLES	
ANHYDRITE	2880 + 407	2879 + 408	
B/ANH.	2916 + 371	2917 + 370	
WAB, STOTLER	3778 - 491	3774 - 487	
HEEBNER	4086 - 799	4084 - 797	
LANSING	4132 - 845	4129 - 842	
B/KC	4386 - 1099	4387 - 1100	
PAWNEE	4500 - 1213	4498 - 1211	
FORT SCOTT	4566 - 1279	4562 - 1275	
CHEROKEE	4596 - 1309	4592 - 1305	
MISSISSIPPI	4744 - 1457	4737 - 1450	

68. CL. W/ N.H. G. 566 1/2.

REMARKS

- 6-27-15 SPUD
- 6-28 @ 306'
- 7-13 - * Vacation Break
- 7-14 @ 1640'
- 7-15 @ 2864'
- 7-16 @ 3450'
- 7-17 @ 3817'
- 7-18 @ 4139'
- 7-19 @ 4428'
- 7-20 @ 4485'
- 7-21 @ 4615'
- 7-22 @ 4840'

API: 15-193-20954

* Csk operator reported Elevation was lowered 2 1/2" Making location

3282 GL (Start)

LEGEND

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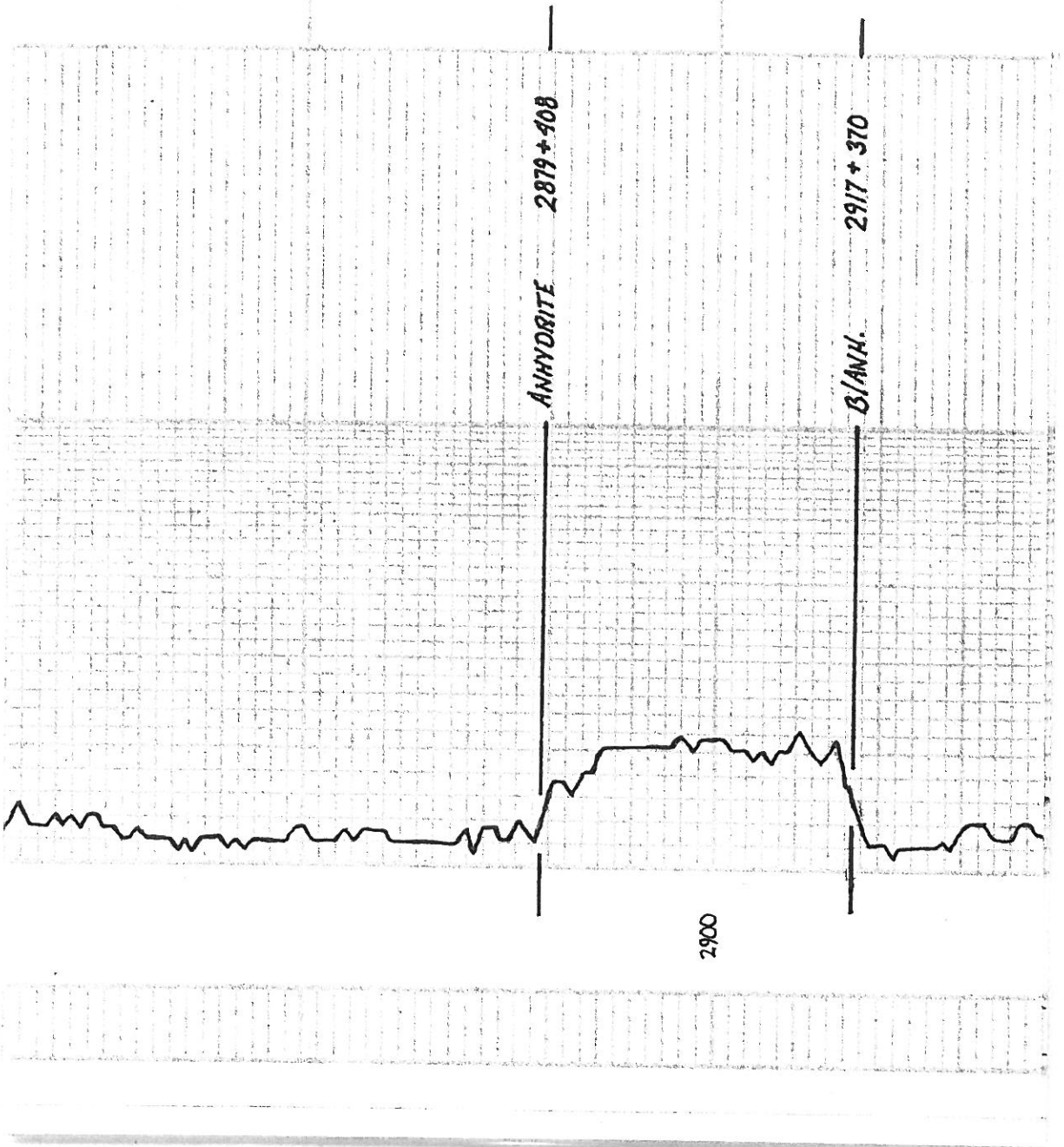
TRAILING TIME IN MINUTES PER FOOT
 Plus of Penetration Readings

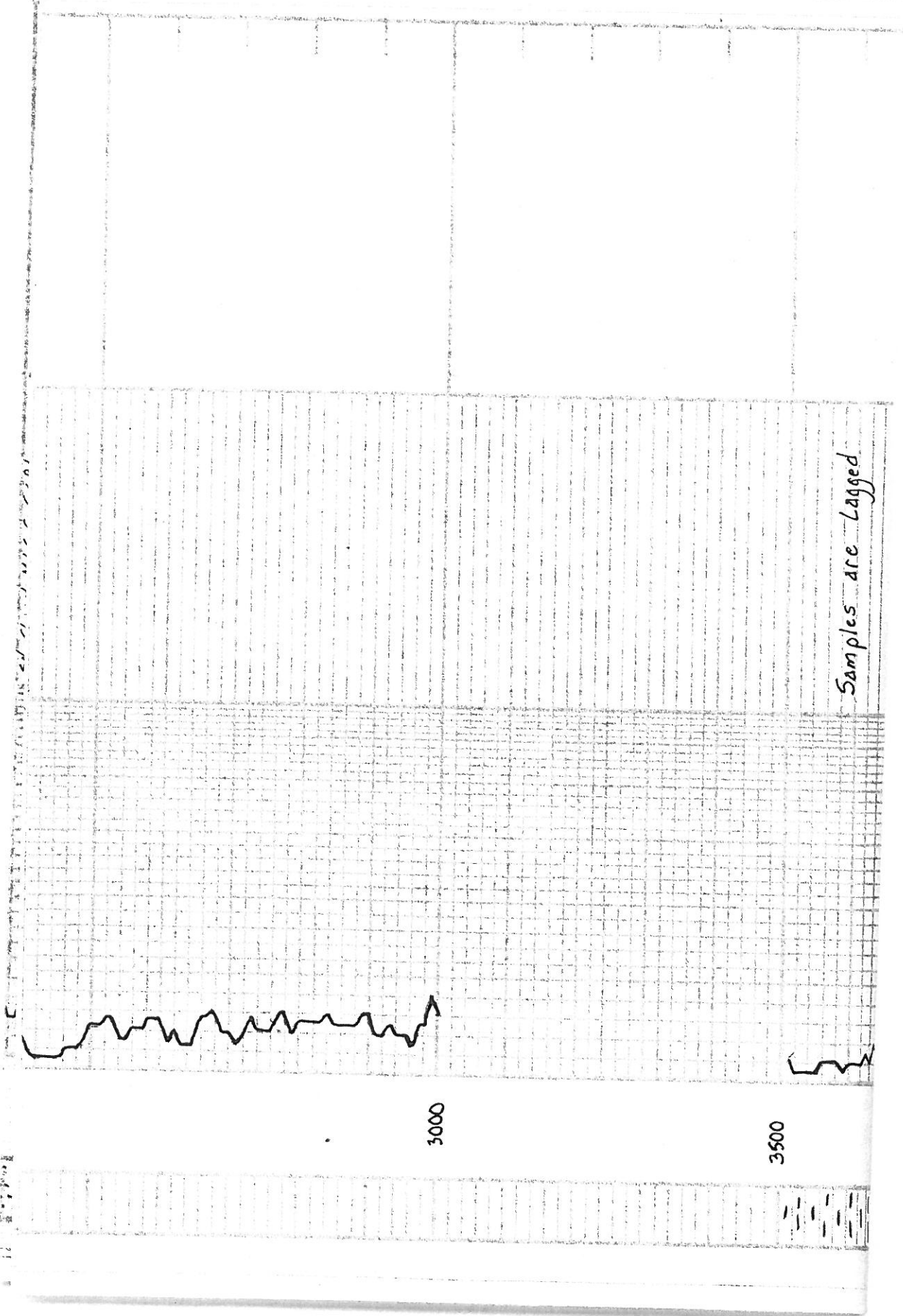


LITHOLOGY

SAMPLE DESCRIPTIONS

REMARKS





Samples are Lagged

3000

3500

3000

Sh. Rd

Sh. Rd, 1346

Sol. City, Va 1946. S. Rd. well. Exposed

Sh. Rd. Sol

Py. 51 1885 SA

63. 107. 1885. SA. 2. w/ D&L P&G. del. SA. (3226)

Doc. City. 1874 184

Sh. City

15. 101. 51. 1885. SA. A

Sh. City

Sh. City

Sh. City

3100



WAB. STOTLER 374-487

LS Bl. Foss. F.P. No. 10 of DE in Sat. Str. No. 1000
F.P. No. Flour. (3800)

Dol. Bl. V. 10 of USI. Foss. Str. P. P. in Ph. P. No. 1000
Bl. Sat. Str. G.S.F. No. Flour. (3800)

LS. wt. Str. Foss. SI-A

Sh. G.

LS. wt. Ltg. Mix. Foss. SI-A

LS. wt. SI. Foss. vs. Ch. G.

LS. wt. Ch. G.

Sh. Rd.

LS. wt. SI. Foss. SI-A. P. No. 10 of DE in Sat. Str. No. 1000
F.P. No. Flour. (3800)

LS. Tr. wt. USI. Foss. SI-A

LS. G. vs. Foss. SI-A

Sh. Rd.

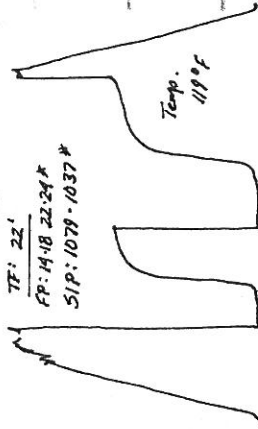
LS. G. vs. Ph. P. Str. In. G.

DST (1) 3781-3817

1st OPEN: Blow with to 1 1/4"

2nd OPEN: " " " 2 1/2"

30-60-45-90
Rec. 7' CO 31 GRAY @ 60°F
15' OCM (157-01.887M)



Tool Sample: 100% oil.



VIS: 53

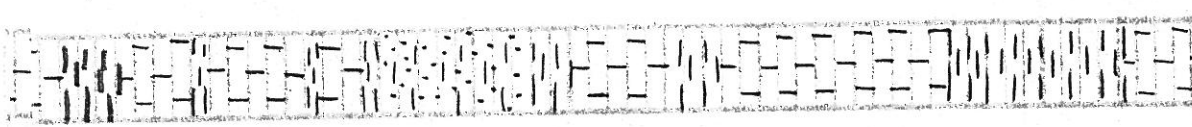
VIT: 8.9

WL: 6.4

CHL: 2500

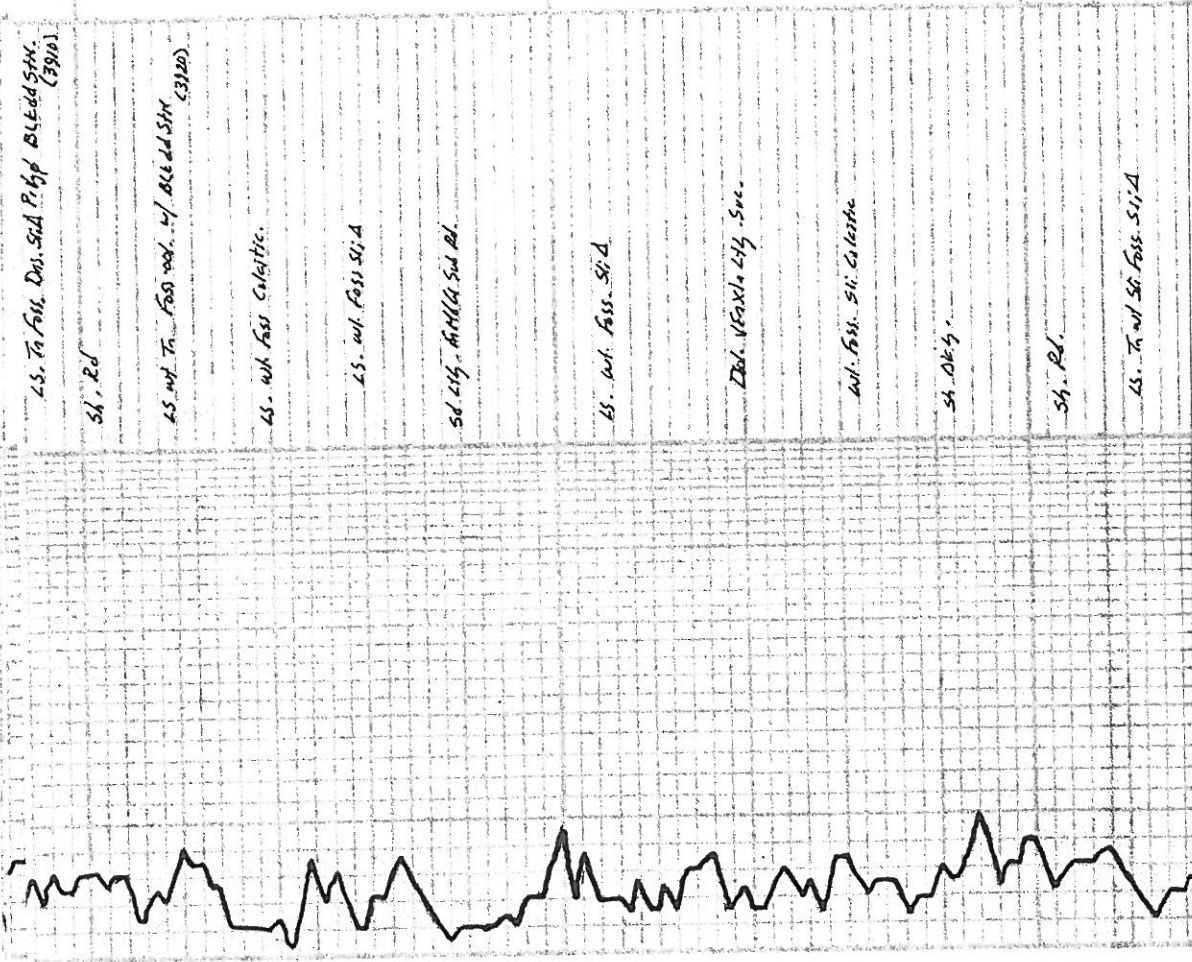
3800





3900

4000



LS. To Fall. Dos. Sud. P. 1/2/2 BLEED STR. (3910)

SI. Rd

LS. Mt. To. Fall. 100. 4/ BLEED STR. (3920)

LS. Mt. Fall. Celestic.

LS. Mt. Fall. Sija

SD. City. Mt. Fall. Sija. Bl.

LS. Mt. Fall. Sija

LS. Mt. Fall. Sija. Sija.

LS. Mt. Fall. Sija. Celestic.

SI. Rd.

SI. Rd.

LS. To Mt. Fall. Sija.

LS wt. Foss. Sil. A. w/ BLE & VY del SAM.
(9000)

Sh. Rd.

LS. wt. B. Foss. Calcitic.

Sh. g.

LS. wt. Foss. Calcitic.

LS. wt. 900/Foss. Sil. A

LS. Sil. Sil. A

HEBNER 4084-797

Sh. BLE Carb.

LS. Tr. V. Sil. Foss. Sil. A

Sh. Lt. Breccia. Sil.

Sh. Blue Sil. Sh.

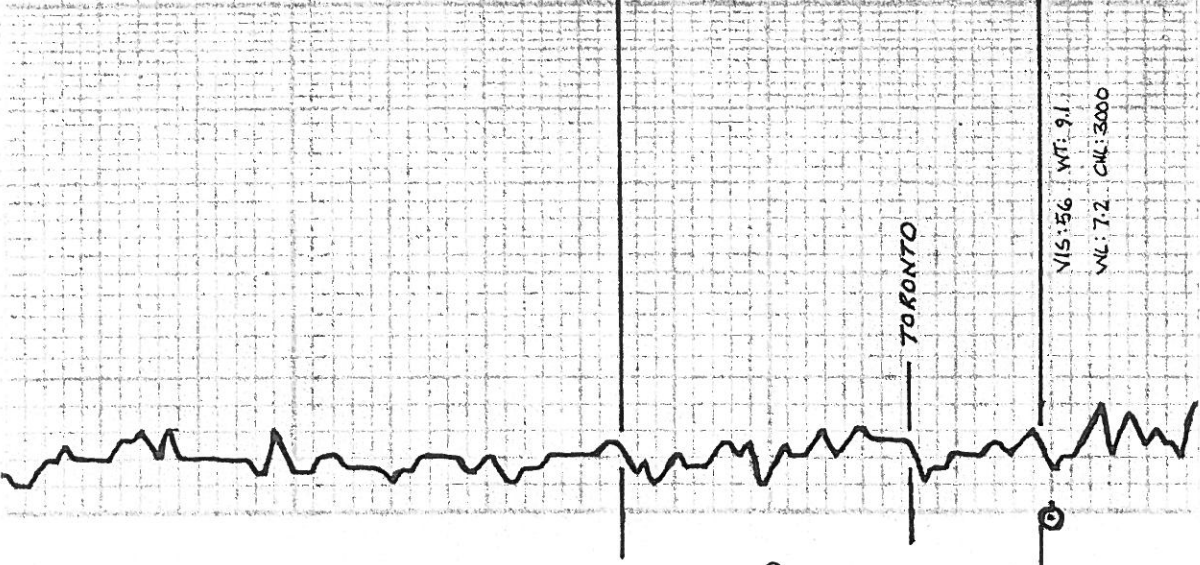
LS. wt. Sil. Foss. Sil. Chly.

Sh. Rd.

LANSING 4129-892

LS. wt. Sil. Foss. Sil. A

Δ Orange



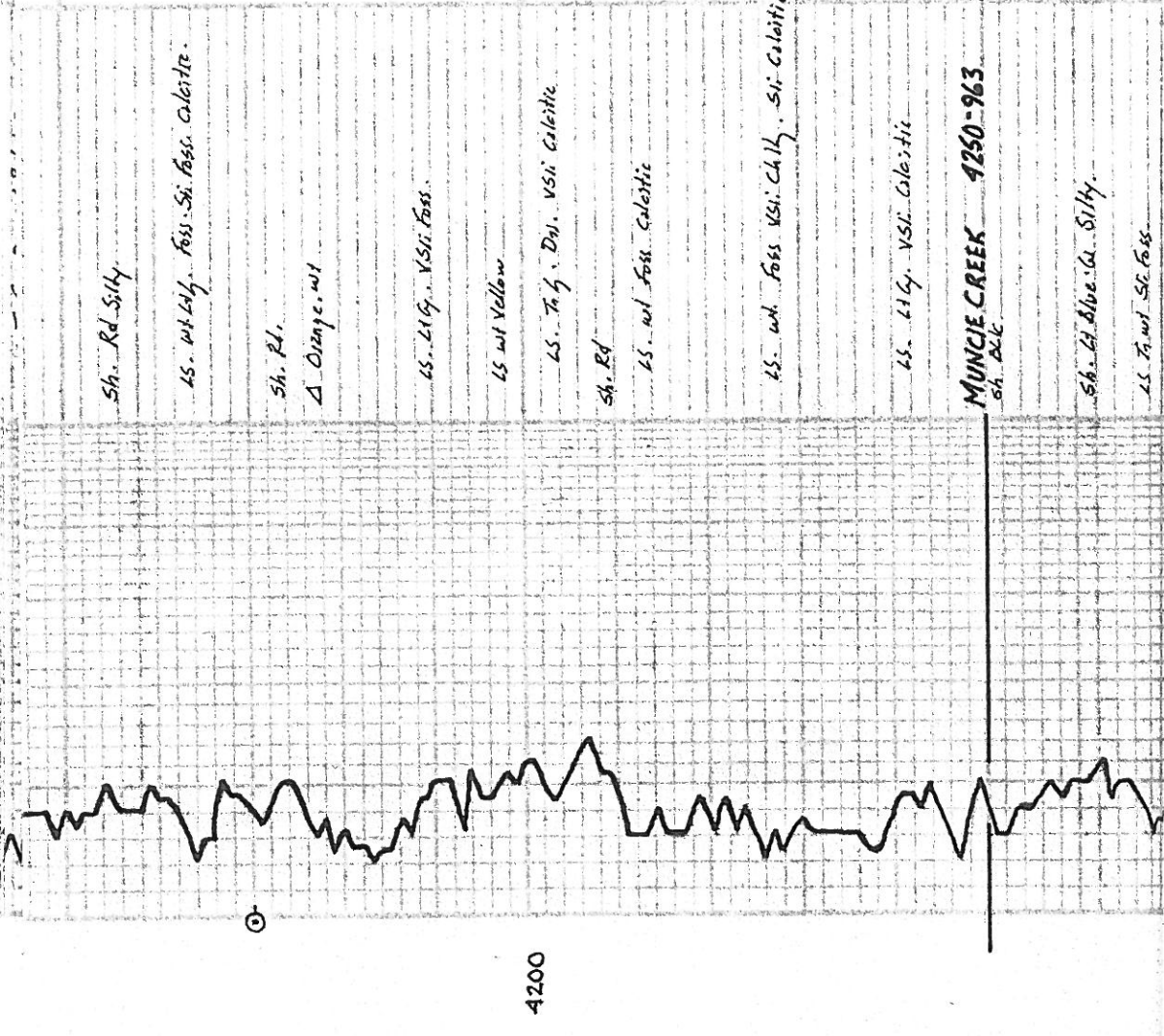
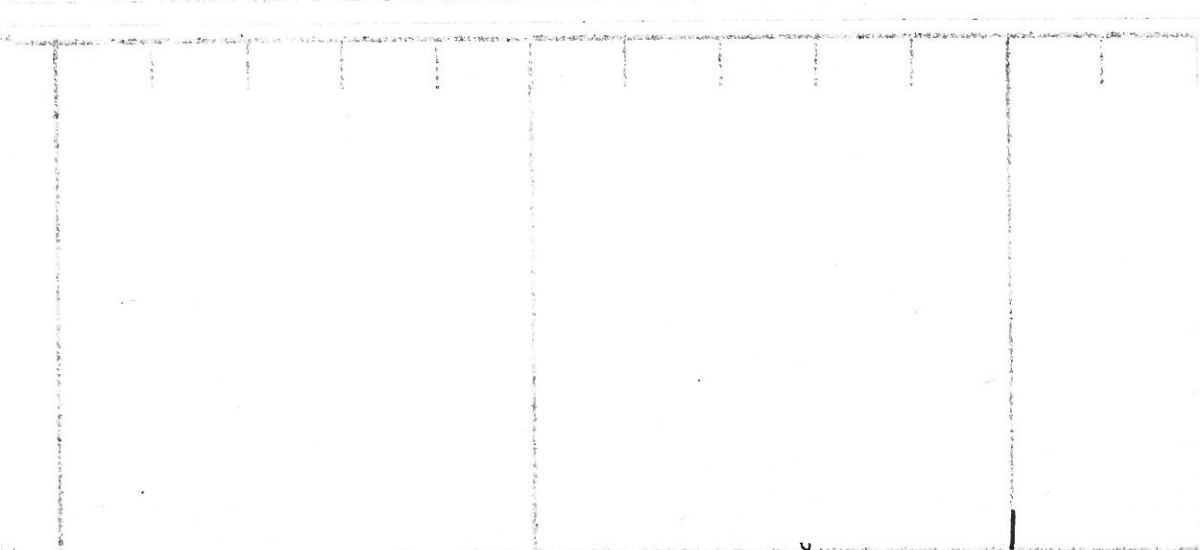
4100

TORONTO

VIS: 56 WT: 91

WL: 7.2 CH: 3000

⊙



Sh. Rd. Silty

LS. wt. clay. Foss. Sil. Foss. Calcite.

Sh. Pl.

Δ Orange, wt

LS. clay. V. Sil. Foss.

LS wt Yellow

LS. Tan. Dsl. V. Sil. Calcite

Sh. Rd

LS. wt Foss. Calcite

LS. wt. Foss. V. Sil. Chalk. Sil. Calcite

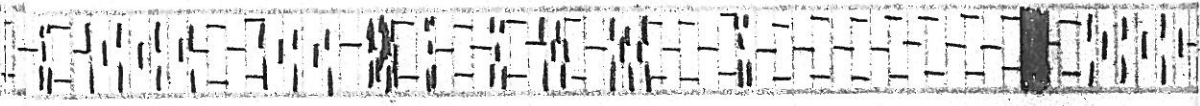
LS. clay. V. Sil. Calcite

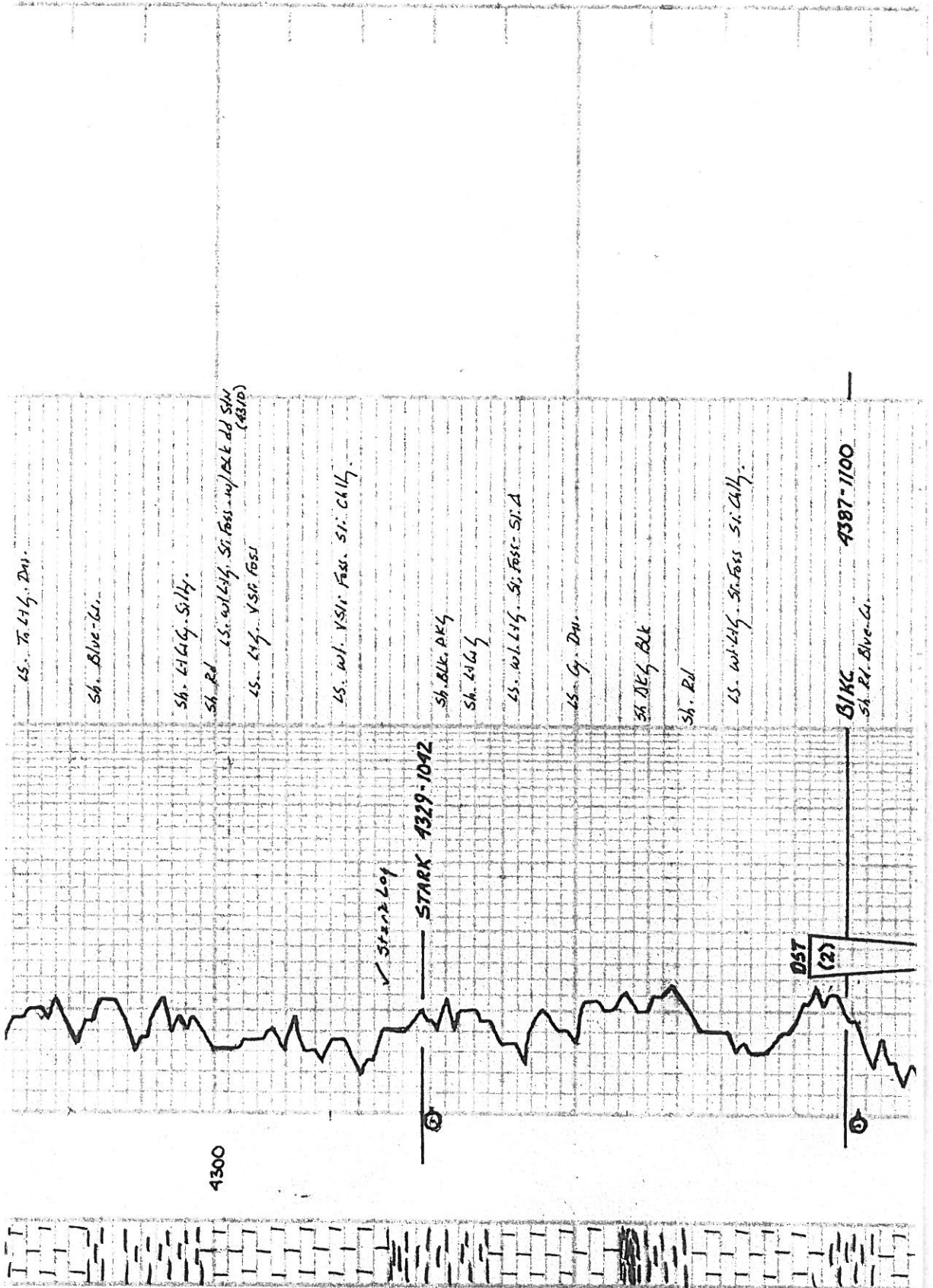
MUNCIE CREEK 4250-963
Gr. Dsl

Sh. G. Blue-G. Silty.

LS. Tan wt Sil. Foss.

4200





ls. to lg. Du.

Sh. Blue-Gl.

Sh. L. G. Silty.

Sh. Rd. ls. w. lg. St. Foss. w/blk. dd SW (4310)

ls. L. G. V. St. Foss.

ls. w. V. St. Foss. St. Call.

Sh. Blk. Ark.

Sh. L. G.

ls. w. L. G. St. Foss. St. A

ls. G. Du.

Sh. Ark. Blk.

Sh. Rd.

ls. w. lg. St. Foss. St. Call.

Blk. St. Rd. Ave. G. 4387-1100

MARMATON 4400 - 1113

LS. To 14 ft. Silty. P. V. 1/4
DE. R. Seal. Silty. 55FB. No. 0 bar.

Sh. L. G. Purple

ALTAMONT 4420 - 1133

LS. L. G. Silty

LS. G. Silty - V. Fair

Sh. L. Blue. RI

LS. To 7 ft. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4100)

Sh. RI Silty

LS. L. G. G. Silty

LS. G. Silty

Sh. D. G. L. Blue. G.

PAWNEE 4498 - 1211

LS. To 11 ft. V. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

L. G. Foss. L. G. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

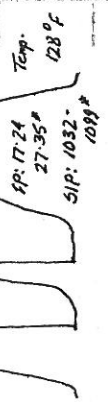
LS. W. Silty. Foss. Silty. F. V. 1/4
No. 0 bar. (4520)

4400

4500

DST (2) 4382 - 4460
1500 PSI Blow built to 23 1/2"
ZOOBEN: " " " 5"
30-60-45-30

Rec. 106' L. P.
12' CO GRAY
28' V. HO. CM
TF: 50'
31.5 @ 60°F
(43' 0.01571 M)



MARMATON 4400 - 1113

LS. To 14 ft. Silty. P. V. 1/4
DE. R. Seal. Silty. 55FB. No. 0 bar.

Sh. L. G. Purple

ALTAMONT 4420 - 1133

LS. L. G. Silty

LS. G. Silty - V. Fair

Sh. L. Blue. RI

LS. To 7 ft. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4100)

Sh. RI Silty

LS. L. G. G. Silty

LS. G. Silty

Sh. D. G. L. Blue. G.

PAWNEE 4498 - 1211

LS. To 11 ft. V. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

L. G. Foss. L. G. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

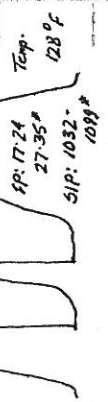
LS. W. Silty. Foss. Silty. F. V. 1/4
No. 0 bar. (4520)

4400

4500

DST (3) 4480 - 4527
1500 PSI Blow built to 11 1/4"
ZOOBEN: " " " 1 1/4"
30-60-45-75

Rec. 2' CO 26 GRAY @ 60°F
28' 50 CM
TF: 30'
31.5 @ 60°F
(43' 0.01571 M)



MARMATON 4400 - 1113

LS. To 14 ft. Silty. P. V. 1/4
DE. R. Seal. Silty. 55FB. No. 0 bar.

Sh. L. G. Purple

ALTAMONT 4420 - 1133

LS. L. G. Silty

LS. G. Silty - V. Fair

Sh. L. Blue. RI

LS. To 7 ft. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4100)

Sh. RI Silty

LS. L. G. G. Silty

LS. G. Silty

Sh. D. G. L. Blue. G.

PAWNEE 4498 - 1211

LS. To 11 ft. V. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

L. G. Foss. L. G. Silty. Foss. Foss. F. V. 1/4
No. 0 bar. (4520)

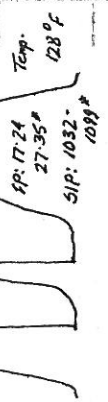
LS. W. Silty. Foss. Silty. F. V. 1/4
No. 0 bar. (4520)

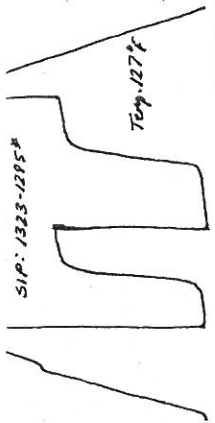
4400

4500

DST (3) 4480 - 4527
1500 PSI Blow built to 11 1/4"
ZOOBEN: " " " 1 1/4"
30-60-45-75

Rec. 2' CO 26 GRAY @ 60°F
28' 50 CM
TF: 30'
31.5 @ 60°F
(43' 0.01571 M)





29. DEG. AGE. 12050

4.4g/g

Sh. 4g/g

LS. wt. Si. Foss. Si: A

Sh. Blc. **FORT SCOTT 4562-1275**

LS. To G. V. Si. A. VSL. CHALK

LS. To. Wt. V. Si. Foss. Si: A

Δ Blc. DE. Si. Foss.

CHEROKEE 4592-1305
Sh. Blc. Crab

LS. To G. V. Si. Foss. DE. Foss.

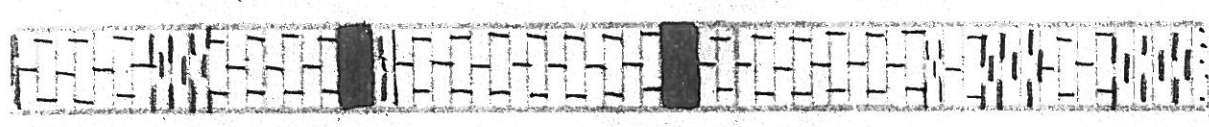
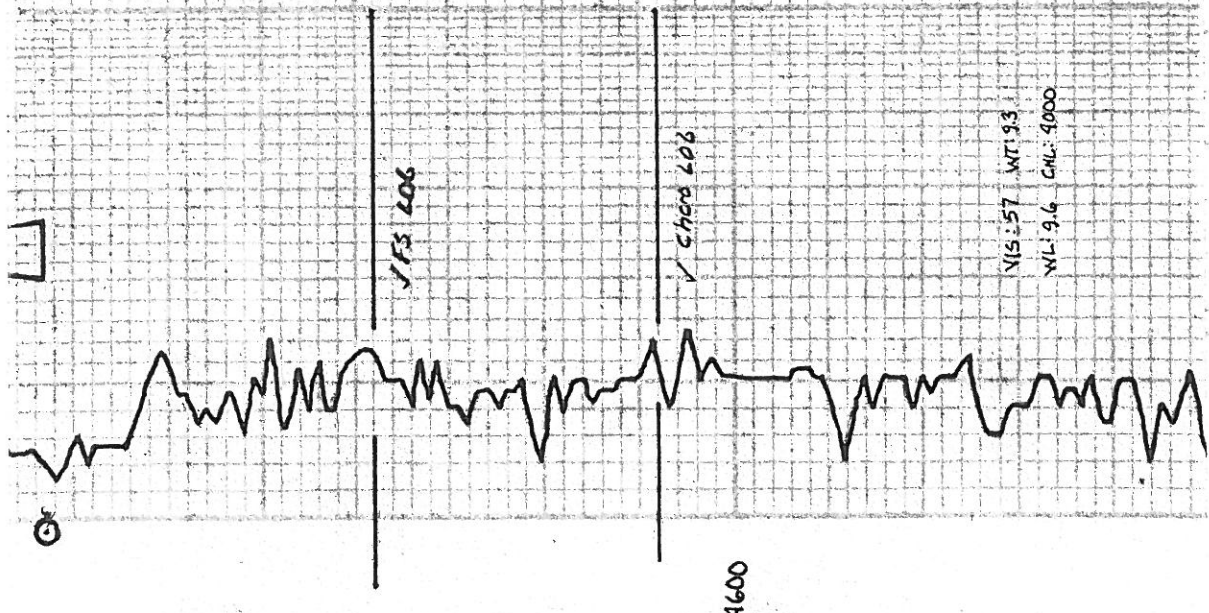
LS. wt. Si. Foss. Sh. Chalk.

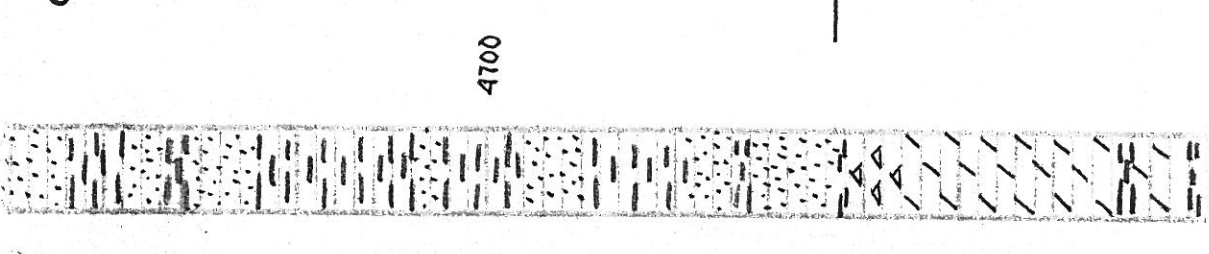
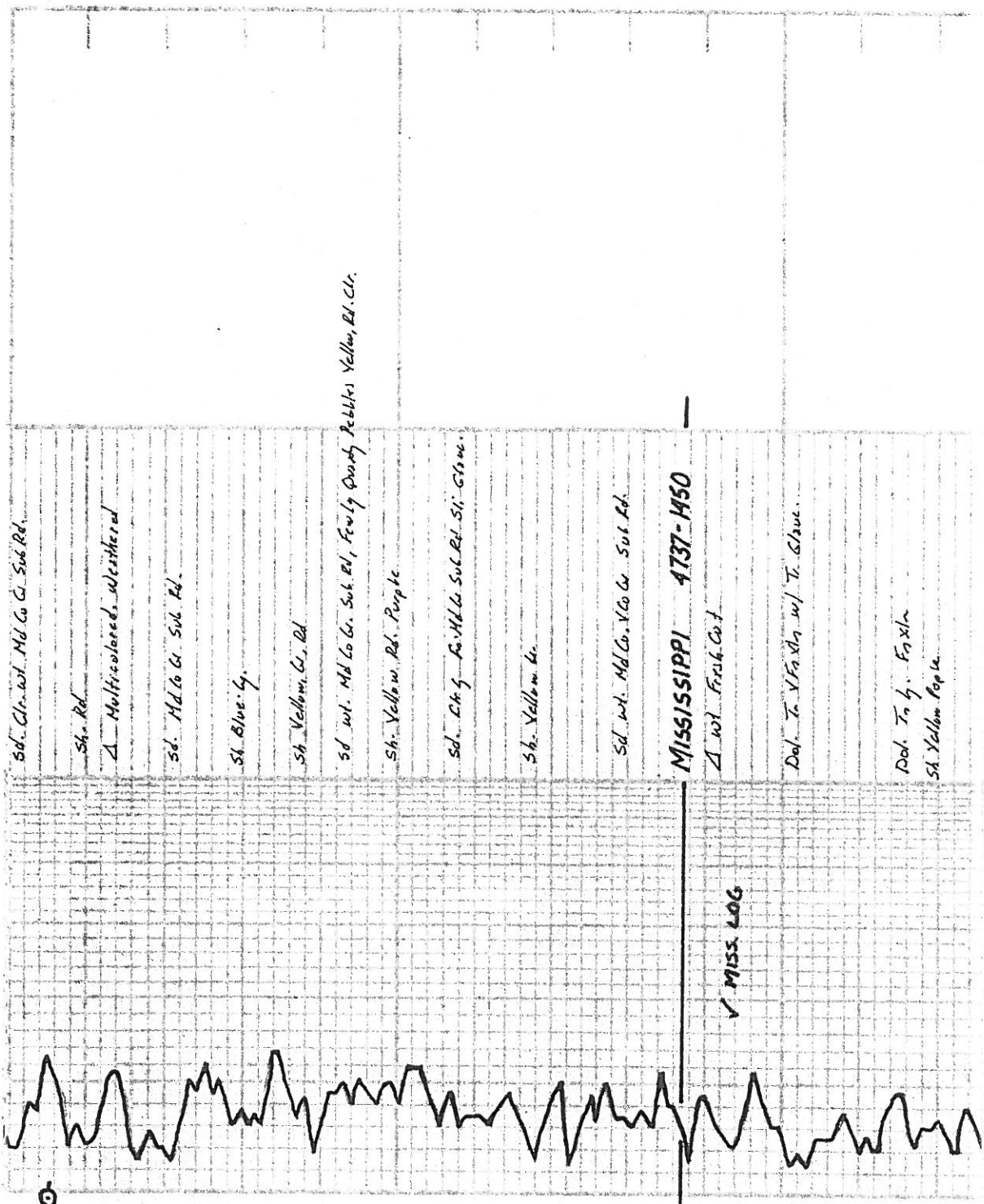
LS. 4g/g. Dm

Sh. 4g/g

LS. To G. V. Si. Foss. DE. Foss. Sh. Blc. Crab
V. Si. Foss. CO. R. Si. Foss. M0060
(4650)

Sh. 4g/g. Dm. Sily: Si: H





Sd. Ch. wt. Md Co. G. Sub Rd.

Sh. Rd.

Δ Multicolored, weathered

Sd. Md Co. G. Sub Rd.

Sh. Blue-G.

Sh. Yellow, Cr. Rd.

Sd. wt. Md Co. G. Sub Rd., Fewly Quarry Pebbles Yellow, Bl. Cr.

Sh. Yellow, Rd. Purple

Sd. Ch. G. F. Md Co. Sub Rd. Sl. Stone.

Sh. Yellow Cr.

Sd. wt. Md Co. No Co. Sub Rd.

MISSISSIPPI 4737-1450

Δ wt. Fresh Cut

Dol. To. V. Fresh w/ T. Bl. Sue.

Dol. To. G. Fresh

Sh. Yellow Pop. Cr.

MISS LOG

4700

Dol. Ltg. Fresh. Sil. Foss.

Dol. Bdy. Fresh.

Sh. Ltg. Silty. Purple G.

Dol. G. Fresh. Sil. Foss.

Dol. G. Fresh. Sil. Silty.

A. w. Mdy. Sil. Foss.

Ls. Bdy. Sil. Foss. Sil. Calcifit.

Dol. Ltg. Fresh. Sil.



4800

RTD 4840-1553

